

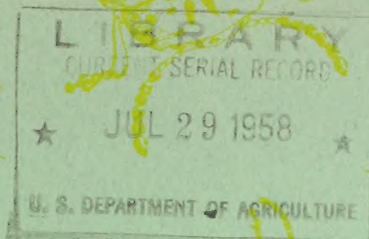
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Cooperative
**ECONOMIC INSECT
REPORT**

Issued by

PLANT PEST CONTROL DIVISION

AGRICULTURAL RESEARCH SERVICE

UNITED STATES DEPARTMENT OF AGRICULTURE

AGRICULTURAL RESEARCH SERVICE

PLANT PEST CONTROL DIVISION

PLANT PEST SURVEY SECTION

The Cooperative Economic Insect Report is issued weekly as a service to American Agriculture. Its contents are compiled from information supplied by cooperating State, Federal, and industrial entomologists and other agricultural workers. In releasing this material the Division serves as a clearing house and does not assume responsibility for accuracy of the material.

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United States Department of Agriculture
Washington 25, D. C.

COOPERATIVE ECONOMIC INSECT REPORT

Highlights of Insect Conditions

GRASSHOPPERS hatching in economic numbers in central Wisconsin, fewer generally than in 1957 in Montana. Heavy in panhandle counties of Nebraska, migrating from field margins. Migrating from rangelands to cultivated crops in California, being heavy in some areas. (p. 645). Control of MORMON CRICKET effective in Utah. (p. 645).

EUROPEAN CORN BORER damaged corn in all parts of Virginia, pupating in central Kentucky. Populations in southwestern Wisconsin higher than earlier egg mass counts indicated. (p. 646). Egg counts high in Alabama. (p. 661).

Damage by CORN EARWORM for 1958 in Alabama worse than in past several years. Counts high in Louisiana, damage severe throughout New Mexico and serious in areas of Utah. (p. 647).

ARMYWORM moth catch high at North Platte, Nebraska. (p. 648).

SPOTTED ALFALFA APHID increased rapidly in western and southwestern Oklahoma. Counts highest for over a year. (p. 650).

BOLLWORMS continue number one pest of cotton in South Carolina. (p. 656).

SPRUCE BUD SCALE reported for first time in California. (p. 658). ✓

ADDITIONAL NOTES. (p. 661).

INSECTS not known to occur in the United States. (p. 663).

WEATHER OF THE WEEK ENDING JULY 21

Cool Canadian air moved into the Great Plains as far south as Kansas at the beginning of the period, and by midweek covered the entire northern half of the Nation east of the Rockies. As the cool Canadian air continued to flow into areas north of the front which extended from Kansas to Virginia, temperatures remained well below normal, averaging as much as 12° below normal for the week at Dubuque, Iowa. Scattered frost occurred in the northern and central lowlands of Wisconsin, with a low of 35° recorded at Danbury on the 16th. Beneficial rains fell in the north central Interior at the beginning of the week, and maintained adequate moisture for crops in most areas. However, topsoil moisture is still short in northeastern Montana and more rain is still needed in the eastern third of South Dakota. In southern areas, that is, south of the frontal zone extending from Kansas to Virginia, typical summertime weather prevailed. Afternoon temperatures generally rose into the 90's and moderate to heavy local thundershowers furnished adequate to abundant moisture except in some sections of the lower Great Plains where heat, drying winds, and growing plants depleted soil moisture at a rapid rate. Rain is needed in the southern plains and parts of the upper coast of Texas, and in all of New Mexico except in eastern portions. Unusually heavy and frequent rainfall occurred along the frontal zone from Kansas eastward to the Appalachians. Weekly totals ranged up to 7 or 8 inches in Missouri and eastern Kansas, and 3 to 5 inches in the Ohio Valley. Many streams from Kansas to southern Indiana are overflowing, including the Missouri River from Kansas City downstream and the mighty Mississippi at points between St. Louis, Missouri, and the mouth of the Ohio.

West of the Continental Divide continued dry weather maintained a high fire hazard in the Pacific Northwest, and lightning set numerous range and forest fires in Oregon and Idaho. In southern desert areas the heat wave of the previous week gradually moderated with temperatures near normal by the 19th and below normal by the 21st when a low of 31° and light frost were reported in the Maverick area of Arizona. Summer rains have begun in southeastern Arizona, and ranges in that area are in good condition but they need rain in the north central and western portions of the State. Temperatures west of the Divide remained below normal most of the time in the Great Basin, with daytime temperatures in the 80's and averages 9° below normal for the week at Elko and Ely, Nevada. The week was relatively warm, however, in extreme southern areas, along the Pacific coast and in Washington. Maxima in eastern Washington at midweek ranged from 95° to 105°. (Summary supplied by U. S. Weather Bureau).

CEREAL AND FORAGE INSECTS

GRASSHOPPERS - MINNESOTA - Low in southeastern district, usually less than one per square yard. Up to 30 per square yard in Faribault and Waseca Counties and westward, with 15 per square yard quite common. Quite low in Rock and Pipestone Counties. Infestations very spotty. Melanoplus femur-rubrum predominant species in southern counties, in first to third instars. Still some hatching. Populations very variable in west central and northwestern districts, 1-27 per square yard in west central, very low in northwest. (Minn. Ins. Rpt.). WISCONSIN - Hatching in economic numbers in lighter soils of central section. Up to 50 M. femur-rubrum nymphs per square yard in Waushara, Waupaca, Marquette and Adams Counties, in surveyed fields with sparse growth where soil temperatures have been high. Averaged 15 per square yard in fields of normal plant growth density. Ranged from first to third instars. Numbers not as high in light soil areas of Green, Rock, Iowa, Richland, Sauk, Columbia, Green Lake and Winnebago Counties. (Wis. Coop. Sur.). SOUTH DAKOTA - Spotty in some areas of north central region, up to 15 nymphs per square yard in alfalfa, 40 per square yard in field margins. M. femur-rubrum dominant species. (Hantsbarger). MONTANA - Appear to be fewer, generally, than in 1957. Scattered infestations in Lake, Sanders, Stillwater, Lewis and Clark, Cascade, Phillips, Blaine and Yellowstone Counties and scattered areas of northeastern part of State. (Roemhild). To July 21, total of 97,562 acres treated under cooperative control program. (PPC). NEBRASKA - M. bilituratus heavy in panhandle counties. Only adults in many areas, indicating migrations have occurred. Third to fourth instar nymphs in some fields, up to 40 per square yard in margins. Light to moderate in wheat. M. bivittatus dominant in south central section, 80 percent adults. Migrations from field margins into corn general, damage to crops evident. Ranged 10-50 per square yard. Late-instar nymphs and adults of M. differentialis in central section ranged 5-40 per square yard, most in field margins. (Roselle, Andersen). Thirty thousand acres treated under cooperative control program to July 21. (PPC). ILLINOIS - Still light, concentrated in field margins, fencerows and ditch banks. Occasional infestations in forage crop fields. (Ill. Ins. Rpt.). OKLAHOMA - Averaged 4-12 per square yard generally in west central and southwestern range areas, somewhat lighter in central area. Averaged 6-20 per square yard in roadsides and margins in former areas. Light to medium damage to margins of cotton, sorghum, corn, legumes and peanuts, often severe to gardens. Second-generation Melanoplus spp. (first and second instars) in several southwestern alfalfa fields. (Coppock). As of July 21 total of 278,583 acres of roadsides, rangeland and idle lands treated under cooperative control program. (PPC). UTAH - Injurious abundant in Mills-Leamington areas of Juab and Millard Counties. Grain and range largely involved. Damaged alfalfa in many Juab County fields. (Knowlton). LOUISIANA - Several species heavily infested pastures in northern parishes. Some treatment applied in Ouachita Parish. (Spink). CALIFORNIA - M. devastator migrating from rangelands into cultivated crops and into houses where they are damaging household goods, Amador County. Mountain populations up to 70-100 per square yard. Hesperotettix sp. medium in the Coalinga area, Fresno County. M. bilituratus light on rangeland in Barstow area of San Bernardino County. (Cal. Coop. Rpt.).

MORMON CRICKET (Anabrus simplex) - UTAH - Control bating covered 24,138 acres in Dry Mesa and Deer Flat areas of San Juan County. Control practically 100 percent effective. Excellent control obtained on 1,220 acres baited in Forshea Mountains, Piute County. Developed light in Government Creek area, Tooele County. Bait to be applied in Jackson Draw, Uintah County. Small infestations southwest of Manila, Dagget County; at Alton, Kane County; and near Enterprise, Washington County. Band discovered in Dagget County, involving 1500 acres south of Dutch John City. (Knowlton, Thornley).

EUROPEAN CORN BORER (*Pyrausta nubilalis*) - MASSACHUSETTS - Egg laying and hatching of first brood over. Larvae working in tassels, stalks and ears of early plantings. Egg laying for second brood expected by August 1. (Crop Pest Cont. Mess.). NEW JERSEY - Apparent damage increased, however, no pupation observed and second-brood moths not yet noticeable. (Ins. Dis. News1.). PENNSYLVANIA - Feeding injury appearing on whorls of field corn in south central part of State. Few larvae ready to pupate. (Pepper). DELAWARE - Second-generation eggs on field corn throughout State. Most common on pre-tasseling field corn adjacent to infested potatoes in western Kent County. Larvae on sweet corn, New Castle County. (MacCreary, Conrad). MARYLAND - First generation caused moderate to heavy damage to early sweet and field corn. Second-generation eggs on field corn, Worcester County. Averaged 75 egg masses per 100 plants in one large corn field near potatoes at Pocomoke, Worcester County. (U. Md., Ent. Dept.). VIRGINIA - Damaged corn in all parts of State, quite severe in many cases. (Morris). Damaged practically 100 percent of sweet corn plants at Painter, Accomack County and approximately 50 percent of ears. Light trap catches continued very heavy. (Hofmaster). KENTUCKY - Pupating in central part of State. Control required on market sweet corn and some field corn. (Rodriguez). ILLINOIS - In east St. Louis bottomland emergence is 50 percent, with total of 90 percent pupation. Averaged 0-10 egg masses per 100 stalks. (Ill. Ins. Rpt.). OHIO - Light at Elyria, Lorain County, and Milan, Erie County. Oviposition nearly complete at Wooster, Wayne County, with some early fifth-instar larvae present. (Triplehorn). IOWA - With continued cool weather and only 8 percent of larvae in northeast section full grown, or nearly so, it appears there will be no second brood. There will be a light second brood in northwestern and southwestern sections of the State. Greatest second-brood potential is in central and western areas of the State. (Iowa Ins. Inf.). ARKANSAS - Few first-generation larvae in central and northeastern fields checked. Moths 30-40 percent emerged, eggs being laid. Fresh feeding signs evident in very few fields. (Ark. Ins. Rpt.). WISCONSIN - Examination of early field corn in 6 southwestern counties showed populations to be higher than earlier egg mass counts indicated. Leaf feeding on 28 percent of plants in several fields. Few unhatched egg masses noted. Approximately 10 percent of larvae in fourth instar in Sauk County, remainder in second and third instars. Majority of egg masses in white head stage in Brown County, with 16 egg masses per 100 plants. Feeding by first instar in Washington and Fond du Lac Counties. Two hundred acres of canning sweet corn treated in Hancock-Plainfield area, Waushara County. (Wis. Coop. Rpt.).

MINNESOTA - Infestation is 34 percent in southwest district, 21 in south central, 16 in west central and 26 percent in central district. Populations appeared much lighter than expected. Weather conditions have been unfavorable during much of egg laying and hatching period. It is unlikely that second generation could be serious threat this season. (Minn. Ins. Rpt.). NORTH DAKOTA - Survey in Cass and Richland Counties indicates first generation not likely to be a problem. Egg masses averaged 1-2 per plant on 10-20 percent of plants. Generally, most eggs still in clear stage. (Colberg). SOUTH DAKOTA - Egg masses averaged 7 per 100 plants, 17 percent of plants showed shothole injury, first to second-stage larvae averaged 71 per 100 plants in northeast region. Egg hatch near complete in north central region, 33 percent of plants with shothole injury, first to second-instar larvae averaged 172 per 100 plants. In central region, egg masses averaged one per 100 plants, 21 percent of plants showed shothole injury, first to third-instar larvae averaged 71 per 100 plants. (Hantsbarger). NEBRASKA - Infestations averaged 10-45 percent in early planted corn, Deuel County. Larvae in second to fourth instars. Ranged 5-70 percent in Platte Valley, most larvae third to fifth instars. (Roselle).

CORN EARWORM (*Heliothis zea*) - NEW JERSEY - Egg laying light but heavier than in past two weeks. (Ins. Dis. News1.). DELAWARE - Entered newly developing ears of sweet corn, Sussex County. One small field had nearly 100 percent of ears infested. (MacCreary, Conrad). VIRGINIA - Damaged corn in Appomattox

County (Rowell, Smith); feeding on tassels, Floyd County (Morris, Talley). ALABAMA - Heavy on corn in central and southern sections. Damage in 1958 has been worse than in past several years. Heavy on millet in Escambia County, with 20 acres almost completely destroyed before control was applied. (Grimes). LOUISIANA - Continued high throughout State. (Spink). TEXAS - Averaged 25 larvae per grain sorghum head, Burleson County. (Randolph). OKLAHOMA - Averaged 8.6 larvae per ear on field corn at Stillwater. Silks have just wilted. (Walton). NEW MEXICO - Eggs and larvae abundant on corn. Damage severe throughout State. (N. M. Coop. Rpt.). UTAH - Serious in early sweet corn, Utah and Washington Counties. (Knowlton).

CORN LEAF APHID (*Rhopalosiphum maidis*) - MARYLAND - First of season noted in tassels of field corn at Pocomoke City, Worcester County. (U. Md., Ent. Dept.). DELAWARE - Colonies increased on field corn, central Sussex County. Alate forms on field corn, Kent County, and on sweet corn, New Castle County. (MacCreary, Conrad). KENTUCKY - Attacked field and sweet corn in various parts of State. Controls applied to market sweet corn. (Rodriguez). NEBRASKA - Generally moderate to heavy in corn and sorghum in central and eastern parts of State. (Roselle). OKLAHOMA - Light in whorls of sorghum in southwestern counties. (Coppock). TEXAS - Heavy on grain sorghum, Kaufman County. (Hawkins). IOWA - In corn in all parts of State. (Iowa Ins. Inf.). UTAH - Caused serious damage to spring barley in many Millard County fields and in some localities of several other counties. (Knowlton).

CORN ROOTWORMS (*Diabrotica* spp.) - COLORADO - Caused severe crown and root damage to corn, Logan and Larimer Counties. (Ext. Serv., Exp. Sta.). NEBRASKA - Caused moderate to severe damage in southeast and south central areas of State. (Roselle). IOWA - *D. undecimpunctata howardi* half to full grown in Washington County. *D. longicornis* larvae two-thirds to full grown. No adults have been reported. (Iowa Ins. Inf.).

A FALSE CHINCH BUG (*Nysius* sp.) - TEXAS - Heavy on grain sorghum in Hill County. (Morgan).

FLEA BEETLES - UTAH - Damaged corn at Mendon and Logan, Cache County. (Knowlton). ILLINOIS - *Chaetocnema pulicaria* averaged 0-4 per plant in East St. Louis area. Stewart's disease appearing in late sweet corn. (Ill. Ins. Rpt.). TEXAS - Active on young milo maize, some damage in Kaufman County. (Hawkins).

A GRASS MITE (*Oligonychus stickneyi*) - NEW MEXICO - Caused considerable damage to field corn. Severely damaged sweet corn, Dona Ana County. Heavy on Bermuda grass at Las Cruces. (N. M. Coop. Rpt.).

LESSER CORNSTALK BORER (*Elasmopalpus lignosellus*) - TEXAS - Caused light damage to young milo maize in Kaufman County. (Hawkins). Damaged peanuts, Mason County. Terminals up to 100 percent infested, Houston and Anderson Counties. (Hawkins, Davis).

SAP BEETLES - NEW JERSEY - *Carpophilus dimidiatus* first observed in any numbers in Burlington County, July 14. (Ins. Dis. Newsl.). DELAWARE - *C. lugubris* prevalent in silk of sweet corn throughout Sussex County. (MacCreary, Conrad). MARYLAND - *C. lugubris* heavy in ears and tassels of early sweet and field corn in most sections. Some corn treated on Eastern Shore. Adults abundant in newly harvested wheat at Boyd, Montgomery County. Apparently came from moldy hay in barn. (U. Md., Ent. Dept.). VIRGINIA - Found in corn sampled. Larvae present in many fields. (Morris). ILLINOIS - *Carpophilus* spp. abundant on early sweet corn in East St. Louis area and southward, particularly in fields where corn earworm and European corn borer not controlled. (Ill. Ins. Rpt.). UTAH - Appearing in some sweet corn in Washington and Millard Counties. (Knowlton).

SORGHUM WEBWORM (*Celama sorghiella*) - LOUISIANA - Moderate on grain sorghum, Tensas and Franklin Parishes. (Spink). TEXAS - Averaged 5 larvae per head in grain sorghum, Burleson County. (Randolph).

SOUTHERN CRONSTALK BORER (*Diatraea crambidoides*) - MARYLAND - Light to moderate in whorls, tassels and stalks of field corn, Worcester and Somerset Counties. (U. Md., Ent. Dept.).

SOUTHWESTERN CORN BORER (*Zeadiatraea grandiosella*) - ARKANSAS - Large percentage of second generation emerged, moths in most central and northeastern areas. Eggs not yet common. Very little feeding sign noted. (Ark. Ins. Rpt.).

ARMYWORM (*Pseudaletia unipuncta*) - NEW JERSEY - Present in considerable numbers, but not threatening at this time. (Ins. Dis. Newsl.). MINNESOTA - Low populations in scattered fields in west central and northwest districts. Occasional fields with 2-3 larvae per square foot, usually in lodged barley. Rye appears to be only grain in which damage has been sustained. Also reported in rye from south central area. Practically all reports indicate very light infestations. (Minn. Ins. Rpt.). WISCONSIN - Limited observations revealed no infestations in small grain. Evidence in corn was of older larval feeding, principally in low, weedy fields. Fifty percent parasitism evident in remaining few nearly mature larvae. Principal parasites were *Apanteles militaris* and *Winthemia quadripustulata* and two unidentified species. High parasitism indicates new generation may not be destructive except for localized areas. (Wis. Coop. Sur.). NORTH DAKOTA - Light in barley and wheat over eastern part of State. Present in most fields, but few in numbers. Little or no leaf stripping observed. Damaged rye in some places at Haley, Bowman County and southwestern Barnes County. Most heavy infestations in rye have been treated. (N. D. Ins. Rpt.). NEBRASKA - Total of 11,940 taken in light trap at North Platte, July 4-10. (Pruess).

APHIDS - OREGON - Caused severe damage to spring barley plantings in Union County. (Sidor).

ENGLISH GRAIN APHID (*Macrosiphum granarium*) - MONTANA - General in northern area grain fields. Most populations below economic levels at present time. (Roemhild). IDAHO - Varied from low to large numbers on spring planted grains, Latah, Nez Perce and Lewis Counties. Often heavy damage to late spring planted barley. Barley failing to head out in severely infested fields. Occasionally 75 per head in spring planted wheat in Lewis County, July 12, but dropped drastically in fields checked by July 16. (Gittins, Manis, Dailey).

HESSIAN FLY (*Phytophaga destructor*) - MONTANA - Caused minor damage in Custer County. (Roemhild). NEBRASKA - Averaged 2-40 percent in western part of State. In eastern portion, most fields show infestations, but degree has not been determined. (Andersen).

CHINCH BUG (*Blissus leucopterus*) - TEXAS - Heavy on Sudan grass in Burleson County. (Hawkins).

SAY STINK BUG (*Chlorochroa sayi*) - UTAH - Damaged small grains near Blanding and Monticello, San Juan County, near Escalante, Garfield County, and several areas in Washington, Sanpete, Sevier, Box Elder, Davis, Weber and Juab Counties. Becoming common on alfalfa and potatoes in many localities. (Knowlton, Thornley). Caused some damage to small grain in Beaver County. (Knowlton).

ALFALFA LOOPER (*Autographa californica*) - OREGON - Adults appeared in light trap collections in Benton and Lane Counties, July 13. (Capizzi). MONTANA - Probably this species, abundant in some alfalfa fields in Stillwater, Jefferson, Broadwater and those counties north of Great Falls, Cascade County. (Roemhild).

ALFALFA WEEVIL (*Hypera postica*) - NEVADA - Caused light to moderate damage to second-crop alfalfa in several fields at Lovelock, Pershing County. (Bechtel, July 11). MONTANA - Caused heavy damage to alfalfa fields not treated. Caused severe damage in areas in Judith Basin, Teton and Cascade Counties where non-economic infestations existed in 1957. (Roemhild). DELAWARE - Adults prevalent on alfalfa, New Castle County, common in one eastern Sussex County alfalfa field. (MacCreary, Conrad).

BLISTER BEETLES - NEW MEXICO - Spotty infestations defoliating alfalfa at Gila, Grant County, and Glenwood, Catron County. (N. M. Coop. Rpt.).

CLOVER APHID (*Anuraphis bakeri*) - WASHINGTON - Increased to 500 per head in some red clover fields near Quincy. (Johansen).

CLOVER ROOT CURCULIO (*Sitona hispidula*) - WASHINGTON - Up to 38 adults per 25 sweeps in second-year red clover seed fields near Quincy, which is highest in Columbia Basin fields during past 3 years. (Johansen). DELAWARE - Unusually prevalent on red clover in western New Castle and western Kent Counties. (MacCreary, Conrad).

CLOVER SEED CHALCID (*Bruchophagus gibbus*) - WASHINGTON - Ranged 5-75 adults per 25 sweeps in red clover seed fields near Quincy. Highest where hay cutting was not taken. (Johansen).

CUTWORMS - OREGON - Predicted extensive outbreaks occurred throughout State. Good control obtained due to timely warning, high losses averted. Predominately *Peridroma margaritosa*, some *Agrotis ypsilon*. Most larvae had reached maturity by July 13. (Every). NEW JERSEY - First 8 *Agrotis ypsilon* moths trapped at Moorestown, Burlington County, July 7. (Ins. Dis. News.). ILLINOIS - *A. ypsilon* damaged few widely scattered fields of late-planted corn. (Ill. Ins. Rpt.). UTAH - *Peridroma margaritosa* caused some damage to alfalfa and gardens in Beaver area. (Knowlton).

FALL ARMYWORM (*Laphygma frugiperda*) - PENNSYLVANIA - Fairly large numbers in hay, Juniata County. (Udine). LOUISIANA - Continued moderate on corn, Caddo and Bossier Parishes. (Spink). OKLAHOMA - Unusually light in alfalfa and sorghum throughout State. (Coppock).

LESSER CLOVER LEAF WEEVIL (*Hypera nigrirostris*) - DELAWARE - Common on red clover, western New Castle County, and on alfalfa, western Kent County. (MacCreary, Conrad).

LYGUS BUGS (*Lygus* spp.) - OREGON - Required control in alfalfa seed fields in Malheur and Umatilla Counties, July 13. (Stephen). NEW MEXICO - Extremely heavy in seed alfalfa. Often averaged 1 per sweep; mostly nymphs in fields checked, Dona Ana County. (N. M. Coop. Rpt.). UTAH - Numerous to damaging in alfalfa seed fields in Millard, Cache and Box Elder Counties, where controls were omitted. (Knowlton). DELAWARE - *L. lineolaris* numerous in red clover and very common in alfalfa in New Castle County and prevalent on Sussex County alfalfa. (MacCreary, Conrad).

PEA APHID (*Macrosiphum pisi*) - UTAH - Required control in parts of Millard County. Threatening in parts of Piute, Garfield, Sanpete and Beaver Counties. (Knowlton). WYOMING - Moderate in second-cutting alfalfa in Cody-Powell area, Park County. (Davison). MINNESOTA - Heavy in alfalfa, 50-400 per 10 sweeps in southern district. Some fields show high counts of lady beetles. (Minn. Ins. Rpt.).

POTATO LEAFHOPPER (*Empoasca fabae*) - WISCONSIN - Numbers doubled in alfalfa in southwestern counties, but are considerably below 1957 levels. Averaged 9 per 100 sweeps in Richland County, 8 in Iowa and 25 per 100 sweeps in one Sauk County field. (Wis. Coop. Sur.). MARYLAND - Averaged 7 per sweep on alfalfa, Frederick County. Injury noticeable to some second-growth alfalfa fields in central counties. Light to moderate on soybeans, lower Eastern Shore. (U. Md., Ent. Dept.).

SIX-SPOTTED LEAFHOPPER (*Macrosteles fascifrons*) - COLORADO - Increases recorded from light trap samples, with 348 at Greeley, Weld County, July 1, and 500 at Rocky Ford, Otero County, July 27. None from Center, Saguache County. (Exp. Sta.).

SPIDER MITES - NEVADA - *Tetranychus* spp. light in various alfalfa fields at Lovelock, Pershing County. (Sebbas, Snyder, July 11). OREGON - *T. atlanticus* required control in several alfalfa fields near Milton-Freewater. (Stephen).

SPOTTED ALFALFA APHID (*Therioaphis maculata*) - NEW MEXICO - Generally light. Occasionally heavy in Dona Ana, Eddy and Chaves Counties. (N. M. Coop. Rpt.). CALIFORNIA - Light on alfalfa in Guinda area, Yolo County. (Cal. Coop. Rpt.). OKLAHOMA - Increased rapidly in western and southwestern areas, with 3000-6000 per 10 sweeps in one Kiowa County alfalfa field, which is highest reported for over a year. Many southwest fields had several hundred to one thousand and more per 10 sweeps. Considerably lower in western section. Very little change in remainder of State. (Coppock). COLORADO - Averaged 4-10 per 100 sweeps, July 11. Slight increase. No spread or new infestations at New Liberty, Mesa County. (Exp. Sta.).

THREE-CORNERED ALFALFA HOOPER (*Spissistilus festinus*) - NEW MEXICO - Common in most alfalfa fields, southern part of State. Highest about 1 per sweep at Gila, Grant County. (N. M. Coop. Rpt.). LOUISIANA - Building up in alfalfa, Caddo and Bossier Parishes. (Spink). TEXAS - Averaged 14 per 10 sweeps on alfalfa, Burleson County. (Turney).

WEBWORMS - NORTH DAKOTA - Infestations of *Loxostege sticticalis* in cereal grains, soybeans and flax requiring controls still being reported from several areas. (N. D. Ins. Rpt.). SOUTH DAKOTA - *L. similalis* larvae appearing in northeastern and east central alfalfa fields, with counts of one per 10 sweeps. (Hantsbarger). NEW MEXICO - *Crambus teterrellus* caused moderate to heavy damage to Bermuda grass at Las Cruces, Dona Ana County. (N. M. Coop. Rpt.).

BEAN LEAF BEETLE (*Cerotoma trifurcata*) - MARYLAND - Caused moderate damage to soybean foliage, Worcester County. (U. Md., Ent. Dept.).

GREEN CLOVERWORM (*Plathypena scabra*) - DELAWARE - Fairly common on Sussex County soybeans, although decreased on all forage crops. (MacCreary, Conrad).

MEXICAN BEAN BEETLE (*Epilachna varivestis*) - ALABAMA - Light to moderate on soybeans in Escambia County, adults, eggs and larvae present. Very light in Baldwin County. (Grimes).

VELVETBEAN CATERPILLAR (*Anticarsia gemmatilis*) - ALABAMA - On soybeans in Escambia and Baldwin Counties in limited numbers. (Grimes).

YELLOW-STRIPED ARMYWORM (*Prodenia ornithogalli*) - ALABAMA - Few specimens of very small larvae on soybeans, Escambia and Baldwin Counties. (Grimes).

RED-NECKED PEANUTWORM (*Stegasta basqueella*) - GEORGIA - Light on peanuts in 14 peanut raising counties. (Johnson). OKLAHOMA - Second-generation larvae about one-half developed in Caddo County. Light to moderate on peanuts, with 12-15 percent of terminals infested. (Walton). TEXAS - Damaged peanuts in Mason County. (Hawkins).

THRIPS - OKLAHOMA - Damage to peanuts in Caddo County generally light. (Walton).

JAPANESE BEETLE (*Popillia japonica*) - VIRGINIA - Present throughout King County, feeding on corn silks (Hall); medium in Essex County, attacked soybeans and corn throughout county (Little); medium on some soybean fields, Northumberland County (Saville). Heavy in some sections of Danville, Pittsylvania County, but not as heavy as in 1957 (Rowell); heavy on Augusta County farm (Willey, Swecker); not as numerous in Warren County as in past several years (Weddle). Severe on corn, grapes and small grain, Shenandoah County. Masses of adults in combined wheat. (Coiner). Light and county wide, Culpeper County. Less than normal. (Heltzel). MARYLAND - Heavy on soybeans planted with Sudan grass at Pocomoke City, Worcester County. (U. Md., Ent. Dept.). DELAWARE - Averaged 8 per 10 sweeps in red clover, New Castle County. Feeding increased on soybeans throughout State. (MacCreary, Conrad).

FRUIT INSECTS

APPLE APHID (Aphis pomi) - INDIANA - Most prominent pest of apples in northern tier of counties. (Marshall). OHIO - Abundant many northern orchards. (Cutright). WISCONSIN - Numerous many orchards in Door County (Wis. Coop. Sur., July 12).

MEALY PLUM APHID (Hyalopterus arundinis) - OHIO - Extremely heavy infestations on plums at Wooster. (Rings).

ORCHARD MITES - DELAWARE - Panonychus ulmi building up on apples throughout State. (Kelsey). INDIANA - P. ulmi building up some orchards at Vincennes (Hamilton) and Tetranychus spp. and P. ulmi increasing rapidly in apples where not rigidly checked in Orleans area (Marshall). KENTUCKY - P. ulmi building up in apple orchards in spite of frequent rains. (Rodriguez). OHIO - Populations of P. ulmi increasing rapidly in orchards not receiving early season preventive sprays in central area. Average 5-12 mites per leaf. (Rings). UTAH - Generally worse than any time during past four years. (Davis, Knowlton).

CODLING MOTH (Carpocapsa pomonella) - NEW JERSEY - Some second-brood entries in Burlington County in apples July 14. (Ins. Dis. Newsl.). PENNSYLVANIA - New brood emerging on apple in Adams County (Asquith) and new entries noted in Lancaster County (Pepper). OHIO - Larvae leaving fruit in increasing numbers. No second-brood moths to July 18. (Cutright). INDIANA - Hatch increasing slowly at Orleans. (Marshall). MISSOURI - Some new entries in apples in southeastern area. (Wkly. Rpt. Fr. Gr.). UTAH - Moderate damage to apples in Utah, Beaver, Garfield, Kane and Washington Counties. (Knowlton).

ORIENTAL FRUIT MOTH (Grapholitha molesta) - OHIO - Twig damage by second-brood larvae generally light. (Rings).

PEACH TWIG BORER (Anarsia lineatella) - CALIFORNIA - Light in early peaches in Reedley area of Fresno County and a problem in Stanislaus County on untreated peaches. (Cal. Coop. Rpt.).

PEACH TREE BORER (Sanninoidea exitiosa) - GEORGIA - Infestations heavy in many orchards in Fort Valley area. Considerable damage to peach trees in area. (Snapp, July 14). COLORADO - Control recommended in Delta County. (Exp. Sta.). RHODE ISLAND - Larval activity evident in Woonsocket. (Caroselli).

WESTERN PEACH TREE BORER (Sanninoidea exitiosa graefi) - OREGON - Abundant some orchards in Milton-Freewater area. (Stephen).

SALT-MARSH CATERPILLAR (Estigmene acrea) - CALIFORNIA - Medium infestation on prune trees in Gilroy area of Santa Clara County. (Cal. Coop. Rpt.).

SAN JOSE SCALE (Aspidiotus perniciosus) - IDAHO - Abundant on cherry trees at Caldwell with considerable feeding damage observed. (Bechtolt).

SAY STINK BUG (Chlorochroa sayi) - UTAH - Caused some damage to cherries and apricots in Washington County orchards. Some attacking developing apples and pears. (Hughes, Knowlton).

PEAR PSYLLA (Psylla pyricola) - CALIFORNIA - Heavy infestation in orchard in San Juan Bautista Valley, San Benito County. First record for county. (Cal. Coop. Rpt.).

PEAR-SLUG (Caliroa cerasi) - RHODE ISLAND - Skeletonizing leaves of cherry trees in Warren, Bristol and North Providence. (Mathewson). NEVADA - Damaging pears and cherries in west central area. (Bechtel, July 11).

PLUM CURCULIO (Conotrachelus nenuphar) - OHIO - Larval emergence from infested fruits nearly completed. No first brood adults emerged at Wooster. (Rings).

POTATO LEAFHOPPER (Empoasca fabae) - CALIFORNIA - Medium infestation of apple trees in southern Plumas County. (Cal. Coop. Rpt.).

WALNUT HUSK FLY (Rhagoletis completa) - CALIFORNIA - Medium infestation of walnuts in San Diego, San Diego County. (Cal. Coop. Rpt.).

WALNUT APHID (Chromaphis juglandicola) - IDAHO - Extremely abundant on black walnut trees in Parma and Payette. (Manis).

FALL WEBWORM (Hyphantria cunea) - LOUISIANA - Remains a problem on dooryard pecan trees throughout State. (Spink).

LEAF ROLLERS - NEW JERSEY - Moth flights of Sparganothis spp. very heavy in cranberries, especially in Ocean County. (Ins. Dis. Newsl.).

CALIFORNIA RED SCALE (Aonidiella aurantii) - CALIFORNIA - Heavy infestations on citrus in Orland area of Glenn County. (Cal. Coop. Rpt.).

TRUCK CROP INSECTS

SUGAR-BEET ROOT MAGGOT (Tetanops myopaeformis) - MONTANA - Severe local damage to beet fields from Hysham to North Dakota border along Yellowstone River. (Roemhild).

BEET WEBWORM (Loxostege sticticalis) - WYOMING - Infestation in Powell-Cody area decreased. Damaging beets and beans in isolated spots. (Davison). MONTANA - Generally present and damaging over State. (Roemhild). NORTH DAKOTA - Several severe infestations injuring sugar beets in Hillsboro area, Traill County. (N. D. Ins. Rpt.). MINNESOTA - Some spraying started in west Polk County. (Minn. Ins. Rpt.).

BEET LEAFHOPPER (Circulifer tenellus) - ILLINOIS - Four adults and 3 nymphs per 100 sweeps in horseradish in one unsprayed field. Most growers following good spray program. (Ill. Ins. Rpt.). COLORADO - Curly top disease in tomatoes, sugar beets and possibly potatoes is chief concern in western and eastern counties. Leafhopper counts 60-80 per 100 sweeps in Garfield County, 80-100 in Montrose County on July 11. Curly top as high as 20 percent in some sugar beet fields in eastern counties; an average of 2-5 percent in Larimer, Weld and Boulder Counties. (Exp. Sta.). UTAH - Generally very abundant on sugar beets. Many fields 40-50 percent curly top-infested over State. (Knowlton).

BEET ARMYWORM (Laphygma exigua) - CALIFORNIA - Heavy infestations on sugar beets in Walnut Grove area of Sacramento County and light on sunflowers in Arboga district of Yuba County. (Cal. Coop. Rpt.).

TARNISHED PLANT BUG (Lygus lineolaris) - PENNSYLVANIA - Fairly abundant on potatoes in south central area. (Pepper).

GREEN PEACH APHID (Myzus persicae) - WASHINGTON - Moderate numbers but increasing, more abundant than usual on tomatoes at Yakima. On potatoes in eastern area. Light populations, less than normal. (Landis).

POTATO APHIDS - MAINE - Populations, although still very small, increased rapidly at Presque Isle and vicinity. Situation normal for time of year. Aphis abbreviata and Macrosiphum solanifolii predominate, followed by Myzus persicae and M. solani. Lady beetles above normal in abundance. (Shands).

POTATO PSYLLID (Paratrioza cockerelli) - WYOMING - Populations building up in central area. Counts 64 per 50 sweeps on matrimonyvine in midwest, lower elsewhere on matrimonyvine and potatoes. (Davison).

LEAFHOPPERS - IDAHO - Empoasca filamenta building up in large numbers in commercial potato fields around Idaho Falls. (Manis). VIRGINIA - Medium to heavy infestations of E. fabae on potatoes and beans in Giles County. (Holpp). PENNSYLVANIA - E. fabae fairly abundant on potatoes in south central area. (Pepper). MARYLAND - E. fabae increasing on beans most sections. (U. Md., Ent. Dept.).

SUGAR-BEET WIREWORM (Limonijs californicus) - CALIFORNIA - Damaged acre of tomato transplants, 10 acres peppers and 60 acres of lettuce in Orange County. (Campbell, USDA).

TOMATO FRUITWORM (Heliothis zea) - NEW MEXICO - Beginning to cause trouble in tomato fields in Luna and Dona Ana Counties. (N. M. Coop. Rpt.).

HORMWORMS (Protoparce spp.) - NEW MEXICO - Damaging tomatoes several fields in Luna, Dona Ana and Lea Counties. (N. M. Coop. Rpt.). DELAWARE - Damaging tomatoes in Kent and New Castle Counties. Second-generation eggs on peppers in Sussex County. (MacCreary, Conrad).

STALK BORER (Papaipema nebris) - NORTH CAROLINA - Numerous in potato stems in Beaufort County. (Neilson, Farrier).

COLORADO POTATO BEETLE (Leptinotarsa decemlineata) - DELAWARE - Adults and larvae very common on potatoes and tomatoes in areas of State. (MacCreary, Conrad).

PEA APHID (Macrosiphum pisi) - IDAHO - Populations in peas in Latah, Nez Perce and Lewis Counties dropped drastically as pea fields began maturing and predators began building up. Damage to peas variable with occasional fields showing considerable feeding damage. (Gittins, Dailey). Abundant on lentils in Moscow area. (Manis).

MEXICAN BEAN BEETLE (Epilachna varivestis) - UTAH - Damage increasing in Cache, Box Elder, Weber and Salt Lake Counties. (Knowlton). ALABAMA - Heavy infestations on lima beans in Escambia County. As many as 100 larvae and adults per 2 feet of row. (Grimes). COLORADO - Adults abundant in Loma and Fruita areas of Mesa County. Egg deposition heavy in early planted fields. Control recommended in Montrose County. (Exp. Sta.). MARYLAND - Heavy on beans in home gardens, light on commercial beans generally. (U. Md., Ent. Dept.). DELAWARE - Feeding heavily on beans in Sussex County. Larvae predominate. (MacCreary, Conrad).

TWO-SPOTTED SPIDER MITE (Tetranychus telarius) - CALIFORNIA - Building up in bean fields in southern area. Some treatments applied, especially along edges of fields. (Campbell, USDA). WASHINGTON - All stages present, light infestation but increasing on dry beans at Quincy. (Landis).

A BEETLE (Strigoderma arboricola) - WISCONSIN - Causing greatest concern to bean growers in Plainfield-Hancock area. (Wis. Coop. Sur.).

ASIATIC GARDEN BEETLE (Autoserica castanea) - DELAWARE - First adult noted July 7. Large flight noted on July 13 in New Castle County. (MacCreary, Conrad).

FLEA BEETLES - NEW JERSEY - Adults very numerous on crucifers from Cape May to Middlesex County. (Ins. Dis. Newsl.). PENNSYLVANIA - Second-generation Epitrix cucumeris appearing on potatoes in south central area. (Pepper). COLORADO - Epitrix tuberis adults 5-10 per 100 sweeps on potatoes in Carbondale area of Garfield County. (Exp. Sta.). CALIFORNIA - Heavy infestations of Epitrix hirtipennis on potatoes in Watsonville area of Santa Cruz County. (Cal. Coop. Rpt.).

CABBAGE APHID (Brevicoryne brassicae) - NEW MEXICO - Infestations damaging cabbage in Luna and Lea Counties. (N. M. Coop. Rpt.).

CABBAGE LOOPER (Trichoplusia ni) - NEW JERSEY - Moderate numbers in Cape May County on crucifers. (Ins. Dis. Newsl.). NEW MEXICO - Moderate to heavy infestations damaging cabbage at Deming, Luna County. Control difficult. (N. M. Coop. Rpt.). DELAWARE - Common on cabbage in Kent and Sussex Counties. (MacCreary, Conrad).

CROSS-STRIPED CABBAGEWORM (Evergestis rimosalis) - ALABAMA - Abundant in Randolph County, but scarce in Lee County on cabbage. (Guyton).

IMPORTED CABBAGEWORM (Pieris rapae) - DELAWARE - Common on cabbage in areas of Kent and Sussex Counties. (MacCreary, Conrad).

WHITE-LINED SPHINX (Celerio lineata) - MONTANA - Scattered and widespread over State. Little damage apparent. (Roemhild).

TORTOISE BEETLES - ALABAMA - Deloyala guttata, D. vittata and Mettriona bicolor moderate on sweetpotatoes in Lee County. (Guyton). NEW MEXICO - M. bicolor damaging chili plants at Redrock, Grant County. (N. M. Coop. Rpt.).

SPINACH LEAF MINER (Pegomya hyoscyami) - OHIO - Second-generation eggs abundant on sugar beets in Milan area, July 15. Very few new blotch mines or living larvae present. (Triplehorn).

PEPPER WEEVIL (Anthonomus eugenii) - CALIFORNIA - Light infestations near San Juan Capistrano, Orange County. (Campbell, USDA).

ONION THRIPS (Thrips tabaci) - NEVADA - Light to heavy populations on onions in Smith Valley, Lyon County. (Gallaway, July 11).

ONION MAGGOT (Hylemya antiqua) - MONTANA - Severe damage to home and commercial plantings in western area. (Roemhild). MINNESOTA - Serious in home gardens in Thief River Falls area. (Minn. Ins. Rpt.). WASHINGTON - Populations, in association with H. cilicrura, considerably greater in dry onion fields near Moses Lake than those which occurred in 1957, even though treatments applied. Second generation pupation at present. (Johansen).

JAPANESE BEETLE (Popillia japonica) - DELAWARE - Prevalent on asparagus ferns in areas of State. (MacCreary, Conrad).

SQUASH BUG (Anasa tristis) - IOWA - Becoming abundant. (Iowa Ins. Inf.). NEW MEXICO - Damaging cantaloup plants in Valencia, Socorro and Hidalgo Counties. (N. M. Coop. Rpt.). UTAH - Damage to squash common in Utah, Millard and Beaver Counties. (Knowlton).

A CUCUMBER BEETLE (Diabrotica undecimpunctata tenella) - NEW MEXICO - Damaging cantaloup plants in Valencia, Socorro and Hidalgo Counties. (N. M. Coop. Rpt.).

MELON APHID (Aphis gossypii) - OKLAHOMA - Light on watermelons in Grady and Noble Counties. (Coppock).

TOBACCO INSECTS

GREEN PEACH APHID (Myzus persicae) - VIRGINIA - Infestations decreased on tobacco in Pittsylvania County. (Dominick). MARYLAND - Building up gradually in southern counties. No treatments required to July 18. (U. Md., Ent. Dept.). NORTH CAROLINA - Increasing on tobacco in Granville County. No serious infestations at present. (Chamberlin).

HORNWORMS (*Protoparce* spp.) - MARYLAND - Generally light on tobacco in Prince Georges and St. Marys Counties. (U. Md., Ent. Dept.). NORTH CAROLINA - Light on tobacco in Granville County. (Chamberlin).

TOBACCO BUDWORM (*Heliothis virescens*) - GEORGIA - Light infestations in 8 counties. (Johnson). MARYLAND - Occasionally moderate infestation in St. Marys County. (U. Md., Ent. Dept.).

TOBACCO FLEA BEETLE (*Epitrix hirtipennis*) - GEORGIA - Light to moderate infestations on tobacco in 8 counties. (Johnson). VIRGINIA - Increasing on field tobacco in Pittsylvania County. (Dominick).

COTTON INSECTS

BOLL WEEVIL (*Anthonomus grandis*) - NORTH CAROLINA - First-generation weevils appeared in lower southeastern counties with sharp increase in square infestations in few fields. Infestations generally low in central and more northern areas. (Cott. News Lett.). SOUTH CAROLINA - First-generation weevils emerging and feeding in Florence area. High infestations in several treated fields in Marlboro County. (Fye et al.). GEORGIA - Infestation counts ranged from 0-76 percent, averaging 22 percent, in 56 northwestern and southern fields. (Johnson). ALABAMA - Infestations increasing to critical point some southern and southeastern areas. Infestations ranged from 1-88 percent. (Grimes). MISSISSIPPI - Infestations remain exceptionally low in delta counties. (Merkl et al.). TENNESSEE - First-generation weevils emerging in most infested fields in western area. Infestations spotty and heavier in older cotton. Square counts made in 79 fields with 49 found infested. Percent infested squares averaged 4 compared with 19 percent at same time last year. (Locke). MISSOURI - First infestations of season in Dunklin County. Eight fields infested with 2 percent or less of squares punctured. (Kyd, Thomas). ARKANSAS - Total of 3792 fields scouted with 44.8 percent found infested. First-generation emergence continues with peak expected during week of July 20. (Ark. Ins. Rpt.). LOUISIANA - Percent infestation averaged 14 in Grant Parish, 11 in Rapides, 12 in Avoyelles, 17 in Ouachita and 7 in Morehouse Parish. (Spink). Average square infestation in Tallulah area was 5 percent in treated fields and 4 percent in untreated fields. (Smith et al.). TEXAS - Square infestation averaged 14.6 percent in treated fields and 38.6 percent in untreated fields in McLennan and Falls Counties. Migration to late fruiting fields expected in near future. (Parenchia et al.). Continue a problem in upper coastal, eastern and northeastern areas. (Gaines).

BOLLWORMS (*Heliothis* spp. et al.). - NORTH CAROLINA - Heavy larval damage in several fields in Scotland and Anson Counties. (Cott. News Lett.). SOUTH CAROLINA - Remain a major threat in Florence area. Several fields in Marlboro County with 50 percent of square, blooms and bolls infested. Many growers consider outbreak to be one of the most severe ever experienced in area. (Fye et al.). Continues to be number one pest of cotton throughout State. (Cott. Lett.). GEORGIA - Egg counts ranged from 3-98 per 100 terminals, averaging 32 per 100 terminals, in 56 northwestern and southern fields. Larvae averaged 8 per 100 terminals. (Johnson). ALABAMA - Larval populations ranged from 0-21 per 100 terminals. Infestations remain constant in southern area. Limited number of eggs found. (Grimes). MISSISSIPPI - Some square injury; no general egg deposition in delta counties. (Merkl et al.). TENNESSEE - Light infestations in western area. (Locke). MISSOURI - Slight drop in larval populations but increase in eggs compared with previous week. (Kyd, Thomas). ARKANSAS - Eggs appearing on cotton. Of 3792 fields scouted, 35.5 percent infested. (Ark. Ins. Rpt.). LOUISIANA - Percent infestation averaged 0.3 to 1 in Grant, Rapides, Avoyelles, Ouachita and Morehouse Parishes. (Spink). Percent square infestation in Tallulah area averaged 5 percent in treated fields and 5 percent in untreated fields. (Smith et al.). TEXAS - Square injury averaged 4.3 percent in McLennan and Falls Counties. (Parenchia et al.). Young

larvae appearing in many areas of State. (Gaines). NEW MEXICO - Eggs and larvae of H. zea mostly light and spotty, with few moderate infestations in cotton growing areas. (N. M. Coop. Rpt.). ARIZONA - Heavy infestations in Pinal County and increasing in Pima County. Some control being applied. (Bottger, Kauffman, Sheets).

APHIDS - SOUTH CAROLINA - Many found in all fields in Florence area. One serious outbreak reported. (Fye et al.). Control warranted many fields in State. (Cott. Lett.). GEORGIA - Infestations light to heavy in cotton growing counties. (Johnson). ALABAMA - Heavy infestations of Aphis gossypii in central and southern areas. (Grimes). MISSISSIPPI - Localized hot spots in delta counties. (Merkl et al.). ARKANSAS - Present in practically all fields; numerous in regularly treated fields where aphidicide not included. (Ark. Ins. Rpt.). LOUISIANA - Building up in treated fields in Tallulah area. (Smith et al.). NEW MEXICO - Scattered moderate to heavy infestations of A. gossypii in Dona Ana, Luna and Eddy Counties. (N. M. Coop. Rpt.).

SPIDER MITES - GEORGIA - Infestations light to heavy in cotton growing counties. (Johnson). ALABAMA - Infestations continue to increase most parts of State. In southeastern area, infestations heavier than previously observed at any time. (Grimes). MISSISSIPPI - Localized hot spots in delta counties. (Merkl et al.). SOUTH CAROLINA - Buildups reported in Coastal Plain counties. (Cott. Lett.). MISSOURI - Light to moderate marginal or widely scattered field infestations. (Kyd, Thomas). TEXAS - Infestations light to medium in McLennan and Falls Counties. (Parencia et al.).

CABBAGE LOOPER (Trichoplusia ni) - GEORGIA - Light infestations in several counties. (Johnson). NEW MEXICO - Continue to buildup throughout most cotton growing areas. Larvae much more numerous than previous week. (N. M. Coop. Rpt.).

COTTON LEAFWORM (Alabama argillacea) - ARIZONA - Two found on cotton in Deer Valley area. (Bottger, Sheets, Kauffman; July 10).

COTTON SQUARE BORER (Strymon melinus) - NEW MEXICO - Occasional larva found on cotton in Socorro and Eddy Counties. (N. M. Coop. Rpt.).

STALK BORER (Papaipema nebris) - MISSISSIPPI - Causing noticeable damage to cotton in Choctaw County. (Hutchins).

FLEAHOPPERS - NEW MEXICO - Populations appear to be decreasing most fields in Chaves, Eddy, Lea, Dona Ana, Luna and Hidalgo Counties. (N. M. Coop. Rpt.). TEXAS - Infestations decreased. Injurious infestations confined to very few untreated fields in McLennan and Falls Counties. (Parencia et al.). Light to heavy populations in central, north central and northeastern areas. (Gaines). ARIZONA - Populations of Rhinacloa forticornis decreasing though still high some fields. (Bottger, Kauffman, Sheets; July 10).

A LEAF BEETLE (Colaspis sp.) - MISSISSIPPI - Feeding on cotton in northeastern counties. (Hutchins). ARKANSAS - Adults present many cotton fields. (Ark. Ins. Rpt.).

STINK BUGS - NEW MEXICO - Heavy infestations of Chlorochroa sayi and C. ligata severely damaging bolls and squares in Deming, Luna County. Less severe infestations in Dona Ana County. (N. M. Coop. Rpt.). ARIZONA - Populations, mostly C. sayi and a small green species, increasing in Pima County. (Bottger, Kauffman, Sheets).

LYGUS BUGS (Lygus spp.) - NEW MEXICO - Light to heavy in cotton growing areas. Counts as high as 35 per 100 sweeps in experimental check plots near Las Cruces, Dona Ana County. (N. M. Coop. Rpt.). ARIZONA - Many fields in Maricopa County heavily populated. One field near Litchfield averaged 24 per 100 sweeps. In Pima and Pinal Counties populations increasing. (Bottger, Kauffman, Sheets).

SNOWY TREE CRICKET (Oecanthus niveus) - OKLAHOMA - Infestations causing alarm to some southwestern growers. Approximately 3 percent lodging of cotton plants due to cricket ovipositioning in Blair area. (Stoner).

THRIPS - TEXAS - Light to medium infestations in eastern, northeastern, north central, west cross timbers and northwestern areas. (Gaines).

FOREST, ORNAMENTAL AND SHADE TREE INSECTS

SOUTHERN PINE BEETLE (Dendroctonus frontalis) - TEXAS - Of the 36 additional spots suspected of being infested, 19, with up to 100 brood trees, were found with this pest. Control either completed or in progress on all known spots and results apparently effective. (Young).

DOUGLAS-FIR BEETLE (Dendroctonus pseudotsugae) - CALIFORNIA - Killing groups of Douglas fir in a 1,100-acre stand of old trees in the Upper Grider Creek area of Siskiyou County. (Weyrick, USFS).

WESTERN PINE BEETLE (Dendroctonus brevicomis) - CALIFORNIA - Seriously damaging Ponderosa pine in a 1,200-acre stand in Stonyford area of Colusa and Glenn Counties. (Lloyd, USFS).

BARK BEETLES (Ips spp.) - CALIFORNIA - Damaging 50 acres of Ponderosa pines in Indian Valley Creek area, Trinity County, as a result of blown-down trees. (Estes, USFS).

ASIATIC OAK WEEVIL (Crytepistomus castaneus) - DELAWARE - Feeding commonly on various oaks throughout State. (MacCreary, Conrad). MARYLAND - Adults causing moderate damage to oak seedlings at Fairland. (U. Md., Ent. Dept.).

SPRUCE BUD SCALE (Physokermes piceae) - CALIFORNIA - Reported for first time in State. Medium infestation on a few spruce trees in Oakland, Niles and at Mission San Jose in Alameda County. (Cal. Coop. Rpt.).

SPRUCE BUDWORM (Choristoneura fumiferana) - IDAHO - Infestation in Gibbon Pass area near North Fork, Lemhi County. Considerable damage to Douglasfir. (Manis).

NANTUCKET PINE MOTH (Rhyacionia frustrana) - ARKANSAS - Emergence of third brood at its peak in south central area. Heavy emergence in infested areas of State expected near end of July. (Ark. Ins. Rpt.).

LARCH SAWFLY (Coleophora laricella) - PENNSYLVANIA - Pupation nearly completed at Clinton. (Drooz). WISCONSIN - More plentiful than in 1957 in Waushara County. Pupation started in west central area. (Wis. Coop. Sur.).

YELLOW-NECKED CATERPILLAR (Datana ministra) - DELAWARE - Damage quite noticeable in eastern New Castle County with as high as 7 colonies on a single tree. (MacCreary, Conrad).

SCALE INSECTS - UTAH - Gossyparia spuria damaging elms at Manti, Salt Lake and Orem. (Knowlton). OKLAHOMA - Heavy infestation of Chionaspis americana on scattered native elms in Stillwater area. (Apt). PENNSYLVANIA - Severe on maple and other shade trees, Luzerne County, July 11. (Nichols).

ELM LEAF BEETLE (Galerucella xanthomelaena) - CALIFORNIA - Heavy and damaging elms in Dinuba area, Tulare County. Damaging yard trees in Sacramento and medium infestations in Santa Cruz. (Cal. Coop. Rpt.). NEVADA - Pupation of first brood in progress in west central area. Adult emergence should begin about July 18. (Bechtel, July 11). ARKANSAS - Damage to Chinese elms locally severe in southwestern area except where control applied. (Ark. Ins. Rpt.).

PENNSYLVANIA - Larvae abundant on and around base of elms in south central area. (Pepper). NEW JERSEY - Very abundant some areas of State. (Ins. Dis. Newsl.).

ELM SAWFLY (Cimbex americana) - SOUTH DAKOTA - Elm tree defoliation in south central region by larvae. (Hantsbarger).

A BARK BEETLE - IOWA - Another case of Dutch elm disease has been confirmed in Scott County. This is the first case reported in 1958. (Iowa Ins. Inf.).

SMALLER EUROPEAN ELM BARK BEETLE (Scolytus multistriatus) - CALIFORNIA - Heavy on elms in San Jose, Santa Clara County. (Cal. Coop. Rpt.). WISCONSIN - Total of 617 elms with Dutch elm disease on July 16. (Wis. Coop. Sur.).

POPLAR AND WILLOW BORER (Sternochetus lapathi) - MONTANA - Severely damaged willows in Hill County. (Roemhild).

MIMOSA WEBWORM (Homadaula albizziae) - MARYLAND - Injury to mimosa trees in Prince Georges County becoming prominent. (U. Md., Ent. Dept.).

A ROYAL PALM BUG (Xylastodoris luteolus) - FLORIDA - Adults and nymphs averaged several hundred per frond on about 100 royal palms at Ft. Lauderdale, Broward County. (Fla. Ins. Sur.).

A MAY BEETLE (Phyllophaga sp.) - NORTH CAROLINA - Defoliating trees, shrubs and flowers in Greensboro and overly abundant in Richmond and Wake Counties. (Jones, Farrier).

MITES - RHODE ISLAND - Severe on arborvitae and spruce in Warwick area. (Caroselli). NEW MEXICO - Oligonychus coniferarum damaging juniper in Albuquerque, Bernalillo County, and Las Cruces, Dona Ana County. (N. M. Coop. Rpt.). MINNESOTA - Tetranychus telarius severe on evergreens in scattered areas throughout State. (Minn. Ins. Rpt.). MARYLAND - Spider mites heavy on spruce at Baltimore. (U. Md., Ent. Dept.).

JAPANESE BEETLE (Popillia japonica) - NEW JERSEY - Causing great deal of concern in central area of State on ornamentals. (Ins. Dis. Newsl.). IOWA - Caught in traps in Ft. Madison area early in July. (Iowa Ins. Inf.). RHODE ISLAND - Heavy adult emergence at Crantston, Cumberland, Lincoln. Other areas generally lighter than in 1957. (Mathewson, Kerr). VIRGINIA - Feeding on flowers, grape vines and fruit trees throughout King George County. Heavy enough to justify treatment of grapes and flowers. (Hall). NORTH CAROLINA - Decreasing in central and eastern areas. Adult emergence approaching peak in western counties, especially Buncombe and Henderson. Heavy populations in Boone area. (PPC). Eastern section of Cumberland County also heavily infested. (Johnson).

FALL WEBWORM (Hyphantria cunea) - NEW JERSEY - Becoming active on ornamentals in southern area. (Ins. Dis. Newsl.). IDAHO - Larvae seriously webbing and tying leaves of chokecherry bushes in the North Fork area of Lemhi County. (Manis). Heavily webbing and seriously defoliating chokecherries in Kamiah and Orofino areas. (Gittins).

BAGWORM (Thyridopteryx ephemeraeformis) - GEORGIA - Very heavy infestation on ornamentals in Fort Valley area. Arborvitae defoliated and grass damaged. (Snapp, July 11). VIRGINIA - Severe and general on arborvitae and similar plants in Hampton and York Counties. Totally defoliated some of the plants. (Adams). Severe on arborvitae in Newport News. (Stump). DELAWARE - Very heavy on red cedars locally in Sussex County. (MacCreary, Conrad). MARYLAND - Heavy on cedars at College Park. (U. Md., Ent. Dept.). TEXAS - Very heavy on evergreens, Kaufman City. (Hawkins).

INSECTS AFFECTING MAN AND ANIMALS

MOSQUITOES - NEVADA - Aedes sp. increasing in Lovelock area, Pershing County. (Bechtel, Snyder, July 11). IOWA - Becoming very serious. (Iowa Ins. Inf.). UTAH - Troublesome in many areas. (Knowlton). NORTH DAKOTA - Culex tarsalis females averaged 100-200 per trap per night in Fargo rural areas. Aedes vexans adults averaged 75 per trap per night showing increase in numbers over week prior to July 14. Larvae in area ponds. (Noetzel). NORTH CAROLINA - Aedes sollicitans population high in Pamlico and Hyde Counties, moderate in Carteret County. (Usry).

HORN FLY (Siphona irritans) - NEBRASKA - Populations building up in sandhills range. (Roselle). UTAH - Annoying cattle in Rich and Weber Counties. (Knowlton). OKLAHOMA - Averaged 200-500 per cow on untreated animals in western one half of State. (Coppock).

ITCH MITE (Sarcoptes scabiei) - NEW MEXICO - Severe on young pigs at Virden, Hidalgo County. Has caused death of some. (N. M. Coop. Rpt.).

STABLE FLY (Stomoxys calcitrans) - NEBRASKA - Populations increased in eastern and central areas. (Roselle).

CATTLE GRUBS (Hypoderma spp.) - UTAH - Heel flies annoying cattle in Rich County and Ogden Valley of Weber County. (Knowlton).

FLIES - IOWA - Stable, horn and horse flies causing considerable loss to beef and dairy herds. (Iowa Ins. Inf.). UTAH - Horse flies extremely annoying to livestock and occasionally biting people in Randolph-Woodruff area and in Allen Canyon, Rich County. Deer flies annoying people and livestock in area of Rich County. (Knowlton).

AMERICAN DOG TICK (Dermacentor variabilis) - NEBRASKA - Increased populations in central Platte Valley. (Roselle).

POULTRY LICE - IOWA - Extremely numerous on farm flocks. (Iowa Ins. Inf.).

FLEAS - NEBRASKA - Numerous infestations of dog fleas in homes in southeast. (Roselle). OKLAHOMA - An unusually large number of dwellings infested in Tulsa area. (Bower).

STORED-PRODUCT INSECTS

A GRAIN MITE (Lepidoglyphus cadaverum) - OREGON - Heavy in ryegrass seed in Salem, July 1. (Krantz).

STORED-GRAIN BEETLES - WASHINGTON - Oryzaephilus surinamensis and Laemophloeus spp. moderately heavy in wheat and barley held over from 1957 harvest in eastern part of State. (Walker).

BENEFICIAL INSECTS

HONEY BEE (Apis mellifera) - RHODE ISLAND - Three cases of foul brood in North Kingston area. (Hansen). MINNESOTA - Prevailing cloudy and cool weather has retarded activity in bee hives over much of State. Warm, sunny weather needed to realize a normal honey harvest. (Minn. Ins. Rpt.).

PREDATORS - NEVADA - Lady beetles, lacewings and syrphid larvae extremely numerous in most alfalfa growing areas of State. (Bechtel, et al., July 11). SOUTH DAKOTA - Lady beetles abundant throughout eastern and south central alfalfa fields, with up to 100 larvae, pupae and adults per 10 sweeps. Lacewing larvae and adults averaged 6 per 100 sweeps in same areas. (Hantsbarger, July 11). IDAHO - Adults emerging in great numbers on crops and wasteland, many parts of Latah, Nez Perce and Lewis Counties. Extreme abundance of this species will probably take care of most aphid problems in these areas. (Manis, Gittins). NORTH DAKOTA - High numbers of adult syrphids in many cereal grain fields in Northwood area, Grand Forks County. (Post). OKLAHOMA - Collops spp. averaged 1-5 adults per 10 sweeps from scattered alfalfa fields in western and southwestern counties. Lady beetles increased in fields with considerable numbers of spotted alfalfa aphid. (Coppock).

MISCELLANEOUS INSECTS

EUROPEAN EARWIG (Forficula auricularia) - NEVADA - Becoming nuisance around homes, damaged garden plants and flowers, Reno-Sparks area, Washoe County. (Bechtel, Lauderdale, July 11). UTAH - Very annoying in several Beaver County localities. A common problem in many communities. (Knowlton). RHODE ISLAND - Continues troublesome throughout State. (Caroselli).

A JERUSALEM CRICKET (Stenopelmatus sp.) - NEVADA - Numerous north of Sparks, Washoe County. (Lauderdale, July 11).

STRAWBERRY ROOT WEEVIL (Brachyrhinus ovatus) - RHODE ISLAND - Entering houses in numbers at Johnston. (Mathewson).

ADDITIONAL NOTES

NEW YORK - APPLE APHID and ORCHARD MITE buildups moderate to heavy in few orchards in Niagara County. APPLE MAGGOT emergence appears to be at low level in Wayne County and may continue later into the season than usual. Hatching of MEXICAN BEAN BEETLE eggs occurring generally. Populations are abundant in Erie County. TOOTHED FLEA BEETLE was exceptionally abundant on weedy corn in Poughkeepsie, July 13-15. First TOMATO HORNWORM moth trapped July 11 in Hudson Valley. (N. Y. Wkly. Rpt.).

ALABAMA - EUROPEAN CORN BORER moths very abundant in northern part of State. In several areas checked, egg masses averaged 50 per 100 plants. (Ruffin).

LIGHT TRAP COLLECTIONS

	Pseud. unip.	Agrot. yps.	Prod. ornith.	Perid. marg.	Protoparce sexta quinq.	Heliothis zea vires.
ARKANSAS						
Atkins 7/10-16						192
Fayetteville 7/10-16	78	31		18		59
Hope 7/10-16	7	2				17
Kelso 7/10-16	15	4		2		2
Morrilton 7/10-16	46	12				10
ILLINOIS						
Urbana 7/11-17	642				8	
INDIANA(Counties)						
Orange 7/9-15	927	22	3	72	22	7
Tippecanoe 7/10-14	4152	9	1	81		
LOUISIANA						
Baton Rouge 7/11-17		2	168			4 1
Shreveport 7/11-17	1		5			4
MAINE						
Monmouth 7/13-19	33					
Orono 7/13-19	7					
MISSISSIPPI						
Grenada 7/7-12	6	4	9			
Senatobia 7/4-17		9				3
*State College 7/6-12	251	12	433	3	1	11 20
*Stoneville 7/11-17	92	130	215	3	14	45 1
NEBRASKA						
Alliance 7/2-7	108	1		73	4	1
Kearney 7/3-10	236	5		141	2	3
Lincoln 7/4-11	3386	280		72		105
North Platte 7/4-10	11,940	61		1869	10	63 23 1
Scotts Bluff 7/8-14	866	9		172		
NORTH CAROLINA						
Clayton 7/17	42	4	36		26	2 10 4
Faison 7/17	18	2	46		12	17 5 1
SOUTH CAROLINA						
Charleston 7/7-20	3	3	213	1	35	5
Clemson 7/12-18	270	10	190	1	27	23 37 3
Florence 7/13-19	145	17	211	38	95	14 150 46
TENNESSEE(Counties)						
Blount 7/8-14	273	27	231	18	6	6 27
Cumberland	514	8	50	30	2	6 20
Greene	1776	15	66	51	6	9
Maury	512		84	12	8	8 24
Robertson	732	12	30	60	12	6 6
TEXAS						
Brownsville 7/8-11		16				48 496

ARMYWORM (*Pseudaletia unipuncta*) - WISCONSIN - 7/8-14: *Arlington - 510;
 Fall River - 132; Janesville - 722; La Crosse - 1000; Middleton - 140;
 Oakfield - 109; Platteville - 652; Ripon - 1496; River Falls - 1710;
 Rosendale - 681; Stevens Point - 66; *Theresa - 796.

*Two traps-State College, 4 traps-Stoneville, 2 traps-Arlington, 3 traps-Theresa.

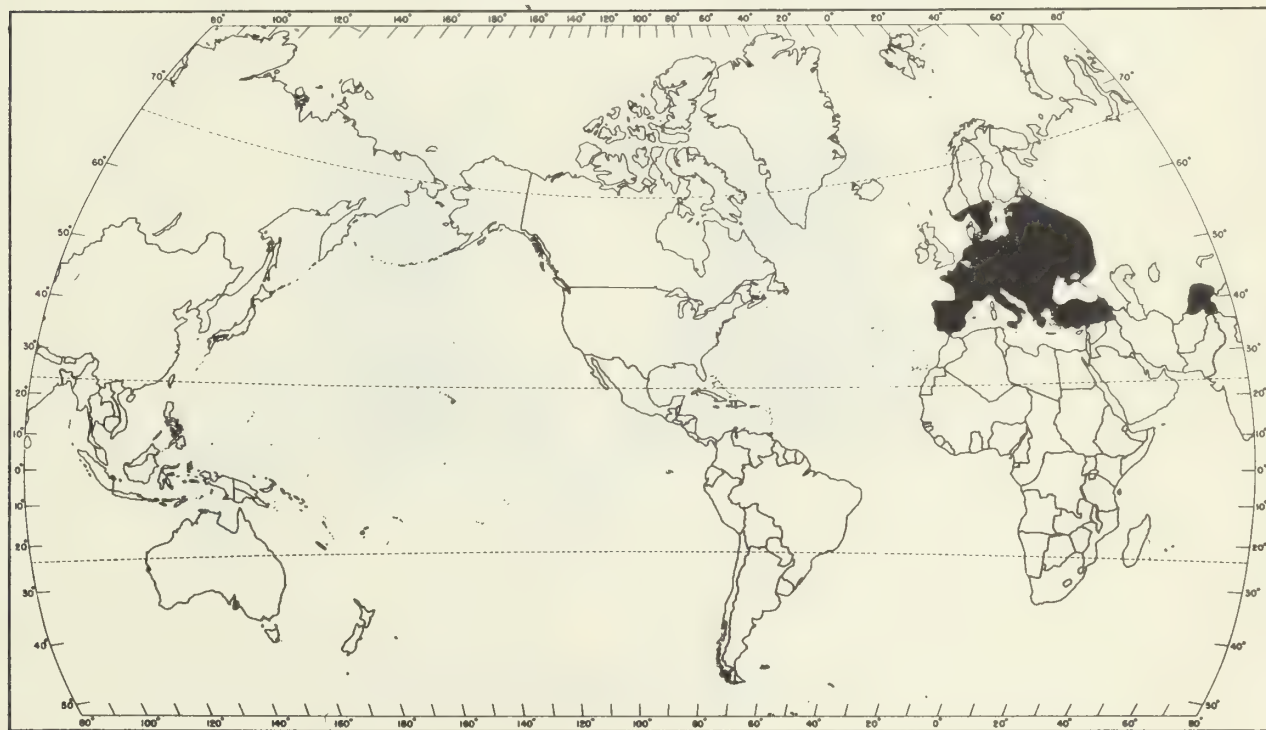
INSECTS NOT KNOWN TO OCCUR IN THE UNITED STATES

EUROPEAN CHERRY FRUIT FLY (Rhagoletis cerasi L.)

Economic Importance: This tephritid is considered to be one of the most serious pests of cherries in Europe. It frequently causes severe damage in central European countries and in recent years has caused severe damage in southern Norway. In Bulgaria in 1929, from 80 to 100 percent of the fruit was damaged in many instances. Infestations in Norway are frequently over 90 percent. Considerable loss occurs in the preserve industry in Germany and further loss is realized in this country from cherry import restrictions operating in Great Britain and other countries. In the past few years it has been intercepted in increasing numbers at U. S. ports of entry. As many as 31 interceptions have been reported at Atlantic Coast ports in a season.

Hosts: The major host is cherry, but it will also attack several other species of Prunus. Lonicera tatarica and L. xylosteum appear to be important alternate hosts, though they are not preferred.

Distribution: Occurs throughout most of Continental Europe and parts of Turkey in Asia. In USSR extends from southern Leningrad province to the Crimea and in southeastern Kazakhstan.

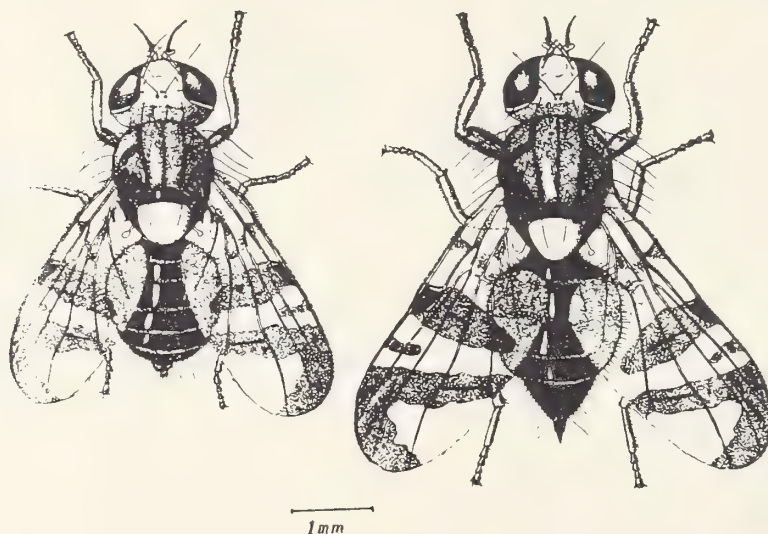
General Distribution of Rhagoletis cerasi

(Tephritidae, Diptera)

No. 55 of Series

Life History and Habits: In France the adults emerge from the overwintering pupal cases in early May. They begin feeding shortly afterward upon the secretions on the tree. Unfed females cannot become sexually mature. Newly emerged adults are sluggish and are easily captured. Weather greatly influences the activity of the adults. They remain immobile on cold cloudy days. In about 11 days the females begin laying eggs in fruits, each laying from 50 to 60 with a maximum of 100. The eggs are placed beneath the epidermis, usually one per fruit. Incubation lasts from 6 to 12 days, varying with temperature. Larval development averages 30 days. When mature, the larvae leave the fruit and enters the soil to pupate. The puparia remain in the soil until the following May, some pupae remain for a second year. Larvae hatching in green fruit rapidly die, but thrive in mature fruit and tunnel toward the center. The tissue around the oviposition scar in infested fruit becomes soft and brownish.

Description: The adult is small, 3.5 to 4 mm. long; almost entirely black; head large, clear yellow anteriorly and dusky on lower face. Face not keeled. Frons little larger than one eye, seen from below. Ocelli triangle, brown; antennae colorless. Chaetae and bristles of head very short. Thorax black with exception of brilliant lateral line. In addition, anterior part of thorax with two brownish longitudinal bands and sides of shield with black spots. Abdomen black, ornamented by marginal hairs on last segments. Femora black, tibiae and tarsi yellow except posterior pair which darken toward middle. Wing with characteristic design. (See illustration of adults). Bands and markings of wings blackish. Males distinguished from females principally by elongation of fifth abdominal segment and absence of ovipositor. Mature larvae white, 2.5 mm. long. (Prepared in Plant Pest Survey Section in cooperation with other ARS agencies.) CEIR 8(30) 7-25-58



Adults of Phagoletis cerasi

Figures (except map) from Norge, I. 1951. Melding fra Statens Plantevern 5, 35 pp.

